

Product Environmental Profile

ABT7PDU... Safety isolating transformer





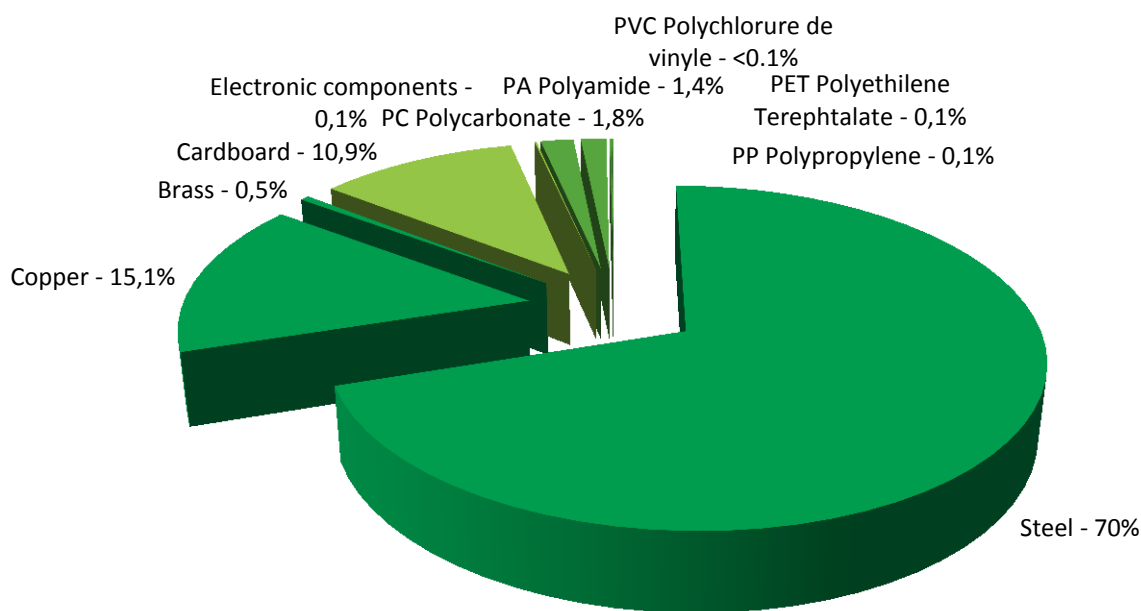
General information

Representative product	ABT7 PDU032B
Description of the product	The main purpose of the ABT7 PDU032B is to convert electricity from 230/400 Voltage Alternative current input to 24/48 Voltage Current output with isolation safety
Functional unit	To convert electricity from 230/400V AC to 24/48V DC for 10 years



Constituent materials

Reference product mass 8300 g including the product and its packaging



Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>

Additional environmental information

The ABT7 PDU032B presents the following relevant environmental aspects

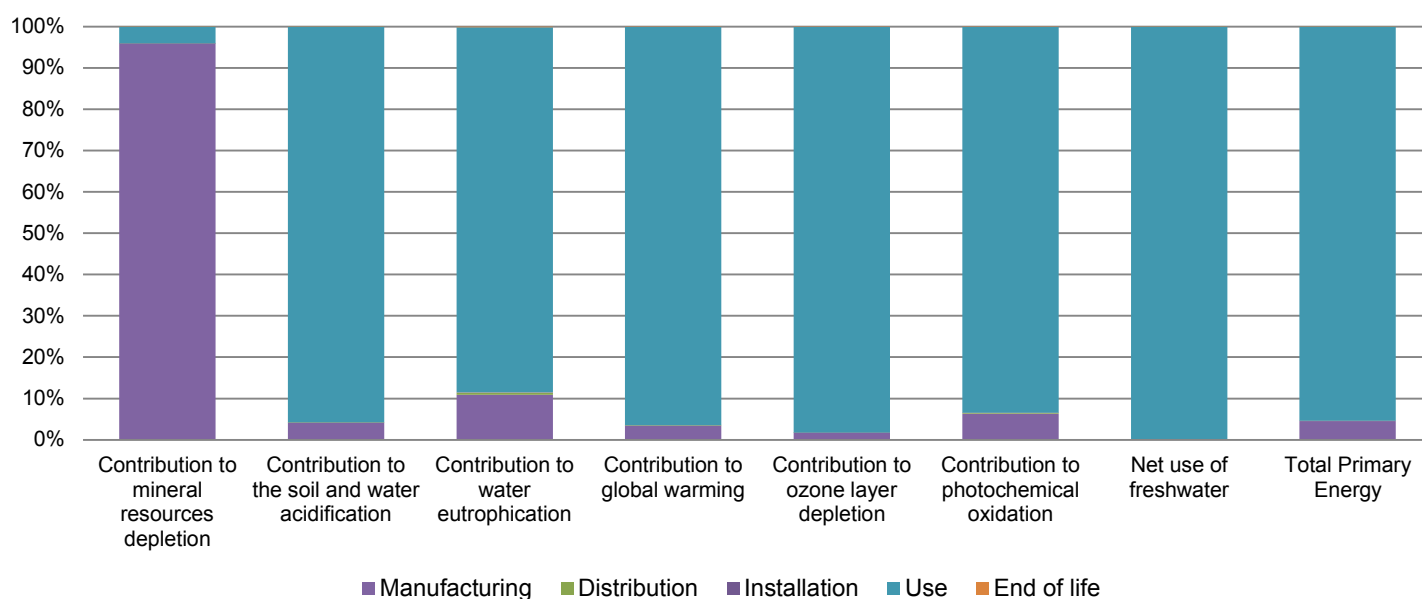
Manufacturing	Manufactured at a production site complying with the regulations
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 910 g, consisting of cardboard (99%) and PP (1%) Product distribution optimised by setting up local distribution centers
Installation	The installation phase varies depending on the installation configuration (use of screws or not for example). As they lead to non significant impact, the installation operations have been excluded from the study scope. In addition, the installation phase includes the packaging end of life treatment.
Use	The product does not require special maintenance operations.
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process. Recyclability potential: 89% Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental impacts

Reference life time	10 years								
Product category	Active products								
Installation elements	The installation phase varies depending on the installation configuration (use of screws or not for example). In this PEP, they have been excluded from the scope.								
Use scenario	Consumed power is 27,2 W 60 % of the time in Active mode, 15 W 25 % of the time in Standby mode, 0 W 0 % of the time in Sleep mode and 0 W 15 % of the time in Off mode.								
Geographical representativeness	Europe								
Technological representativeness	The main purpose of the ABT7 PDU032B is to convert electricity from 230/400 Voltage Alternative current input to 24/48 Voltage Current output with isolation safety								
Energy model used	<table border="1"> <thead> <tr> <th>Manufacturing</th> <th>Installation</th> <th>Use</th> <th>End of life</th> </tr> </thead> <tbody> <tr> <td>Energy model used: Czech Republic</td> <td>Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27</td> <td>Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27</td> <td>Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27</td> </tr> </tbody> </table>	Manufacturing	Installation	Use	End of life	Energy model used: Czech Republic	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27	Electricity grid mix; AC; consumption mix, at consumer; < 1kV; EU-27
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Compulsory indicators		ABT7 PDU032B - ABT7 PDU032B					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	1,86E-03	1,79E-03	0*	0*	7,48E-05	0*
Contribution to the soil and water acidification	kg SO ₂ eq	3,75E+00	1,53E-01	6,44E-03	0*	3,59E+00	2,13E-03
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	2,46E-01	2,67E-02	1,48E-03	6,13E-05	2,17E-01	5,11E-04
Contribution to global warming	kg CO ₂ eq	8,94E+02	3,02E+01	1,40E+00	0*	8,61E+02	7,37E-01
Contribution to ozone layer depletion	kg CFC11 eq	5,72E-05	9,95E-07	0*	0*	5,61E-05	4,49E-08
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	2,12E-01	1,34E-02	4,60E-04	2,83E-05	1,97E-01	2,30E-04
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	3,12E+03	1,55E+00	0*	0*	3,12E+03	0*

Total Primary Energy	MJ	1,81E+04	8,17E+02	1,98E+01	0*	1,72E+04	1,07E+01
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Optional indicators		ABT7 PDU032B - ABT7 PDU032B					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1,01E+04	3,34E+02	1,96E+01	1,20E+00	9,78E+03	9,75E+00
Contribution to air pollution	m ³	4,67E+04	9,48E+03	6,06E+01	9,28E+00	3,71E+04	7,57E+01
Contribution to water pollution	m ³	3,83E+04	2,47E+03	2,30E+02	9,92E+00	3,55E+04	8,20E+01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	3,42E+00	3,42E+00	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	2,20E+03	9,00E+00	0*	0*	2,19E+03	0*
Total use of non-renewable primary energy resources	MJ	1,59E+04	8,08E+02	1,97E+01	0*	1,50E+04	1,07E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2,19E+03	6,21E+00	0*	0*	2,19E+03	0*
Use of renewable primary energy resources used as raw material	MJ	2,78E+00	2,78E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1,58E+04	7,97E+02	1,97E+01	0*	1,50E+04	1,07E+01
Use of non renewable primary energy resources used as raw material	MJ	1,02E+01	1,02E+01	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0,00E+00	0*	0*	0*	0*	0*
Waste categories	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	1,64E+02	1,54E+02	0*	9,25E-01	4,49E-01	8,24E+00
Non hazardous waste disposed	kg	3,24E+03	2,44E+01	0*	0*	3,21E+03	0*
Radioactive waste disposed	kg	2,15E+00	5,19E-03	0*	0*	2,14E+00	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	8,53E+00	1,08E+00	0*	8,98E-01	0*	6,55E+00
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	1,85E-02	2,03E-03	0*	0*	0*	1,64E-02
Exported Energy	MJ	0,00E+00	0*	0*	0*	0*	0*

* represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version EIME v5.5, database version 2016-11.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

<i>Registration N°</i>	SCHN-00179-V01.01-EN	<i>Drafting rules</i>	PCR-ed3-EN-2015 04 02
<i>Verifier accreditation N°</i>	VH15	<i>Supplemented by</i>	PSR-0005-ed2-EN-2016 03 29
<i>Date of issue</i>	12/2016	<i>Information and reference documents</i>	www.pep-ecopassport.org
		<i>Validity period</i>	5 years
<i>Independent verification of the declaration and data, in compliance with ISO 14025 : 2010</i>			
Internal	External	X	
<i>The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)</i>			
<i>The elements of the present PEP cannot be compared with elements from another program.</i>			
<i>Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »</i>			
			

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